

CLAIMS

We claim:

1. A preparation of U binding protein (Ubp).
2. A gene sequence encoding Ubp.
3. An assay to identify modulators of the Ubp/Vpu interaction, comprising the steps of
 - (a) exposing Vpu and Ubp together in the presence of a candidate inhibitor under conditions in which Vpu and Ubp can interact when an inhibitor is not present, and
 - (b) determining whether Vpu/Ubp interaction occurs.
4. The assay of claim 3 wherein the interaction is measured *in vivo*.
5. The assay of claim 3 wherein the interaction is measured *in vitro*.
6. The assay of claim 3 wherein the modulator is an inhibitor.

7. An assay for determining whether a candidate compound modulates the interaction between Gag and Ubp comprising the steps of

- (a) exposing Ubp and Gag in the presence of a candidate compound under conditions in which Ubp and Gag will interact when an inhibitor is not present, and
- (b) determining whether Gag and Ubp interact.

8. The assay of claim 7 wherein the interaction is measured *in vivo*.

9. The assay of claim 7 wherein the interaction is measured *in vitro*.

10. The assay of claim 7 wherein the modulator is an inhibitor.

11. An inhibitor of Ubp/Vpu interaction.

12. The inhibitor of claim 11 wherein the inhibitor comprises a fragment of Ubp protein.

13. An inhibitor of the Gag/Ubp interaction.

14. The inhibitor of claim 13 wherein the inhibitor is a fragment of Ubp protein.

15. An anti-Ubp antibody.

16. A method of creating fragments of Ubp protein comprising examining SEQ ID NO:2 and synthesizing peptide fragments contained within SEQ ID NO:2.

17. A method of detecting members of the Ubp superfamily comprising examining SEQ ID NO:1 and constructing nucleic acid probes designed to specifically hybridize with Ubp homologs in non-human species.

18. A method of detecting members of the Ubp superfamily comprising examining SEQ ID NO:1 and constructing nucleic acid probes designed to specifically hybridized with Ubp homologs present in human cells.

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